

IN THE CLAIMS

Please amend claims 1 and 9-11 and cancel claims 2-4, 6-8 and 12-20 as shown below.

Claim 1 (Currently Amended): A thermal detection device having a hot and a cold region, the device comprising:

a first thermocouple disposed across the hot and cold regions, the first thermocouple having a first terminal ~~at the cold region~~ and a defined polarity;

a second thermocouple disposed across the hot and cold regions, the second thermocouple having a second terminal ~~at the cold region~~ and a polarity opposite to the polarity of the first thermocouple;

a thermal absorber disposed at the hot region and in thermal communication with the first and second thermocouples;

a diaphragm member supporting the first thermocouple and the second thermocouple thereon;

a support rim supporting the diaphragm member thereon, the support rim having a first cavity, the first cavity having a first predetermined maximum width; and

a metal base header having a support surface and a non-support surface supporting the support rim, the metal base header having a second cavity therein communicating with the first cavity, the second cavity having a second predetermined maximum width at least as large as the first predetermined maximum width, wherein the first and second thermocouples generate a voltage across the first and second terminals that is indicative of an amount of thermal radiation absorbed at the thermal absorber;

~~wherein a portion of the support surface opposes a portion of the cold region, and a portion of the non-support surface opposes a portion of the hot region.~~

Claims 2-4 (Cancelled).

Claim 5 (Original): The device of Claim 1, wherein the thermal absorber is a black body.

Claims 6-8 (Cancelled).

Claim 9 (Currently Amended): The device of Claim 1, wherein a depth of the second cavity ~~the distance between the support surface and the non-support surface~~ is equal to or greater than about 0.1 millimeter and equal to or less than about 10 millimeter.

Claim 10 (Currently Amended): The device of Claim 9, wherein the depth of the second cavity ~~distance between the support surface and the non-support surface~~ is about 1 millimeter.

Claim 11 (Currently Amended): The device of Claim 1, further comprising:
a cap disposed to house the first and second thermocouples between the cap and the metal base header, the cap and metal base header defining an internal volume, the cap having a window proximate the hot region for transmitting thermal radiation therethrough.

Claims 12-20 (Cancelled).